

RF 3048



DIST.	LTR	ENC
ZKE, J.C.		
INGAME, A.H.		
R.D.		
JCHER, D.W.		
S. J.G.		
ED, J.E.		
ERA, D.W.		
IS, L.R.		
OR, F.J.		
CIS, G.E.		
DWIN, R.		
Y, T.J.		
ER, E.H.		
J. P.		
E. P. B.		
H. J.M.		
Y, W.A.		
BO, J.A.		
E.M.		
STIC, J.R.		
HEWS, I.A.		
RENS, B.E.		
GAN, R.V.		
TH, P.		
IER, L.A.		
ER, G.L.		
TO, V.M.		
ADES, J.I.		
ELL, B.E.		
INSON, E.B.		
IE, J.S.		
INSON, R.B.		
JAMS, R.E.		
SON, J.M.		
NG, E.R.		
E. J.O.		
Arndt	X	
Busby	X	
Ewan	X	
Langman	X	
Porter	X	
Smith	X	
Ludberg	X	
Backus		
Fishberg		
RES CONTROL	X	X
FFIC		

EG&G ROCKY FLATS, INC.  
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

May 21, 1991



91-RF-3048

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Jim Kunkle  
Advanced Sciences, Inc.  
405 Urban Street, Suite 401  
Lakewood, CO 80228

DEVELOPMENT OF A VADOSE MONITORING PLAN FOR THE ROCKY FLATS WASTEWATER  
TREATMENT PLANT SLUDGE DRYING BEDS - BA 74639PB, Job # 98705100  
- MLB-002-91

EG&G Environmental Monitoring and Assessment Division (EMAD) is requesting that  
Advanced Sciences, Inc. (ASI) prepare a Vadose Zone Monitoring Plan for the Rocky Flats  
Wastewater Treatment Plant Sludge Drying Beds. Elements to be included in the plan are  
outlined below. These details are the result of discussions between EG&G's Clean Water Act  
Division (CWAD) and Environmental Monitoring and Assessment Division (EMAD), and the  
Environmental Protection Agency (EPA).

The monitoring plan is due to EG&G on May 23, 1991. This schedule aims to meet the  
Federal Facilities Compliance Agreement (FFCA) requirement for monitoring in 1991. If  
there are any questions or concerns feel free to contact Meredith Brogden, at 966-5974.

Vadose Zone Monitoring for the Sludge Drying Beds

- I. Identify vadose zone monitoring locations.
  - A. Four monitoring locations will be identified.
  - B. The locations will provide monitoring coverage for all seven drying beds.
  - C. Two locations will be specified for each of the two buildings housing the drying beds.
  - D. Two of the monitoring locations will be along the north or south wall of beds 1-4.
  - E. Two of the monitoring locations will be along the north wall of beds 5-7.

CLASSIFICATION:

ONI	NOT	X	A
CLASSIFIED		X	X
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AUTHORIZED CLASSIFIER  
SIGNATURE *W.L. J.L.*

DATE 5/17/91

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APPROVALS:

W.L. J.L.

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*II. Borehole drilling and lysimeter installation.*

- A. Boreholes will be drilled at the four locations selected .*
- B. A lysimeter will be installed in each borehole.*
- C. Soil Samples will taken from the borehole core.*

III. Sampling and analyses requirements.

- A. Soil samples will be collected at specified intervals for the depth of the borehole.
- B. A single vadose zone water sampling will be completed at each lysimeter initially.
- C. Soils will be analyzed for selected inorganics, metals, and gross alpha / gross beta. Also, physical soil characteristics will be determined.
- D. Water samples will be analyzed for selected inorganics, metals, gross alpha , and gross beta as sample volume permits.

IV. Project scheduling and costs.

- A. The plan shall contain a schedule for implementation.
- B. Time lines (not actual dates) should be presented for each activity of the program.
- C. General costs per borehole for lysimeter installation and sampling (soil & water).

*Meredith L Brogden*

Meredith L. Brogden  
Environmental Monitoring and Assessment Division  
EG&G Rocky Flats, Inc.

*Sh L*

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